



March 5, 2002

Mr. Ron Josephson
Office of Solid Waste (5304W)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue
Washington, DC 20460

RE: Location of "Headworks"

Dear Mr. Josephson:

ACC is pleased that EPA is revisiting 40 CFR 261.3(a)(2)(iv)(A) and (B) pertaining to the current "headworks" exemption in light of the ACC recommendations to (1) update the exemption to address four solvents added to the F002 and F005 listings in 1986 and (2) clarify that direct monitoring, i.e., via sampling and analysis, may be used to demonstrate the concentration of spent solvents in untreated wastewater at the headworks as an acceptable alternative to demonstrating compliance with these provisions by mass-balance calculations.

To facilitate this revision, you have expressed an interest in better understanding how the regulated community determines the location of the headworks. We are happy to provide the following information. We do not believe, however, that the contemplated revisions actually require a regulatory definition of headworks. After all, an exemption based on constituent concentrations at the headworks has been a feature of the RCRA regulations for more than 20 years. A facility relying on the current exemption must identify the headworks for the purpose of conducting a mass-balance calculation, and we believe a similar mechanism will work for a direct monitoring approach.

"Headworks" is a Well-Understood Concept in Wastewater Treatment.

While not explicitly defined in RCRA regulations, wastewater treatment operators and regulators have developed a common understanding of the concept of "headworks." A cursory review of wastewater treatment references indicates that, in general, the headworks is the last point of common aggregation of untreated wastewaters prior to centralized treatment. To illustrate this point, we include the following citations:

1. "Headworks" means that portion of a wastewater treatment plant which first receives the total influent flow for initial treatment. (*New Hampshire Code of Administrative Rules, Chapter Env-Ws 1201 Sewer Use Rules, Env-Ws 1201.03 Definitions*)
2. Headworks--For the purposes of this chapter, the first treatment unit or wet well within the plant. (*Pennsylvania Code: Title 25. Environmental Protection; Part 1. Department of Environmental Protection; Subpart C. Protection of Natural Resources; Article II. Water Resources; Chapter 94. Municipal Wasteload Management General Provisions; Section 94.1. Definitions*)

3. Headworks: The facilities where wastewater enters a wastewater treatment plant. The headworks may consist of bar screens, comminutors, a wet well and pumps. (*Operation of Wastewater Treatment Plants, Vol. 1 & II, Advanced Waste Treatment*)
4. Headworks: The initial structures and devices of a water or wastewater treatment plant. Wastewater treatment plant: (1) an arrangement of devices and structures for treating wastewater, industrial wastes, and sludge. Sometimes used as synonymous with waste treatment plant, sewage treatment plant or wastewater treatment works. (2) A water pollution control plant (3) a facility engineered and constructed to remove pollutants from a predominantly liquid medium. (*Glossary Water and Wastewater Control Engineering, Third Edition, 1981, Published by American Public Health Association, American Society of Civil Engineers, American Water Works Association, and Waste Pollution Control Federation.*)
5. "Headworks analysis" means a mathematical method used to determine the maximum allowable loading of a pollutant at the "headworks" or influent to the treatment plant. (*New Jersey Administrative Code: Title 7, Department of Environmental Protection, Chapter 14A, Pollution Discharge Elimination System, Subchapter 1.2, Definitions*)

While each of these defines "headworks" using different language, they all describe the same concept.

Centralized Wastewater Treatment Systems May Have More Than One "Headworks."

It is also important to recognize that the headworks of a given centralized wastewater treatment system may occur at more than one point, depending on the systems configuration. For the purpose of the exemption, regulators would be concerned with the last point of common aggregation of wastewaters containing the designated spent solvents prior to centralized wastewater treatment.

Accompanying this letter are drawings of three wastewater treatment systems. The first illustrates a system with a single headworks prior to the influent pump station, before the influent from the 5 diversion tanks. The second illustrates a system with two headworks - one before the oil/water separator prior to the introduction of the sludge dewatering filtrate and another before the equalization (mixing) tank where additional untreated wastewaters are introduced but prior to the introduction of wastewaters from the cooling tower. The third also illustrates a system with headworks located at two points - at the number 1 lift station and at the total wastewater feed from process 2 before it enters the equalization pond.

The number of points identified as "headworks" for a given system should be irrelevant so long as the facility can document that (1) the spent solvents are being treated and (2) the concentration of spent solvents do not exceed the regulatory limits at the point of treatment.

Such an interpretation is consistent with the Agency's position in a June 10, 1989 interpretive letter that states, "The purpose of the rule [the headworks exemption] was to keep the large volumes of treatment sludges from falling within the scope of the listing(s) *when, in fact the wastewater treatment system could handle the amount of solvents contained in the wastestream as it entered the headworks of the treatment system.*" (emphasis added)¹

In addition to the RCRA requirements, the facility's wastewater discharge limits create additional regulatory incentives to ensure that excessive solvents are not introduced into the system and those that are received are appropriately treated prior to discharge.

Current Mechanisms to Justify Exemptions are Appropriate for this New Exemption.

Rather than try and craft a single definition in new regulatory language that would appropriately capture the variety of centralized wastewater treatment designs, we would instead recommend you reference a facility's current obligation to document and justify compliance with any exemption - in this case by identifying the locations of the headworks and maintaining the records demonstrating the concentrations of the spent solvents at those points. The burden of proof will always rest with the facility to demonstrate that it qualifies for a RCRA exemption. Such an approach is consistent with existing RCRA requirements and allows the facility the flexibility to identify the headworks based on the unique configuration of its centralized wastewater treatment system without compromising an inspector's ability to verify the facility's compliance with the exemption.

We look forward to working with you and your colleagues on this and other reforms to the RCRA mixture and derived-from rules. If you have questions, please contact me at 703-741-5236 or Dorothy_Kellogg@american-chemistry.com.

Sincerely,

Dorothy Kellogg
ACC Waste Issues Team

3 attachments

¹ June 10, 1989 OSWER Letter from Don Clay to Jacqueline E. Schafer, Assistant Secretary, (Installations and Environment), Department of the Navy.

